WIRELESS WELL COMMUNICATION SYSTEM AND METHOD

Abstract

Well data and production control commands are transmitted from a remote central data store to wells at a remote location with a well hopping system and method, preferably through a radio frequency (RF) network. Request packets are sent through a field station to one or more well units until it reaches the destination well unit. The destination well unit executes the data request or the command and sends a response data packet back to the central data store through the RF network using the same well hopping system and through the field station. The central data store reads and stores the data. One or more satellite offices are connected to the central data store and can download data from the central data store or send/receive data packets to/from the well units. Oxygen content in production gas can be detected and transmitted to the central store for monitoring and reporting.